MULTIMEDIA UNIVERSITY

STUDENT ID NO

Table No: _____

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2019/2020

TIS2351 – HUMAN-COMPUTER INTERACTION

(All sections / Groups)

23 October 2019
02:30 p.m. – 4:30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of 5 pages with 4 Sections only.

2. Attempt **ALL** questions in **SECTION A, SECTION B, SECTION C** and **SECTION D**. The distribution of the marks for each question is given.

3. Please write all your answers in the answer box associated with each question in this question paper.

Section A: Answer all questions.

Fill in each blank with ONE word that best describes the meaning of the sentence as a whole.

(10 marks)

Social mechanisms have evolved in face-to-face and remote contexts to facilitate conversation, 1)___ and awareness. When people are 2)___ closely together, they talk to each other, issuing commands and letting others know how they are progressing. 3)___ communication is also used including nods and winks. For time-critical and 4)___ collaborative activities, especially where it is difficult to hear others because of physical conditions, people frequently use 5)___. Various kinds of hand signals have evolved, with their own set of standardized 6)___ and 7)___. The arm and baton movements of a 8)___ coordinate the different players in an orchestra while the arm and baton movements of a ground marshal at an airport signal to a pilot how to bring the 9)___ into its allocated gate. 10)___ gestures, such as waving and halting hand movement, are also used by people in their everyday settings.

Answer
1)
2)
3)
4)
5)
6)
7)
8)
9)
10)

Continued...

Section B: Answer all questions.

Indicate the ONE best answer for each question.

(10 marks)

Answer

1) The following are basic activities in interaction design EXCEPT
   A. Designing alternatives.
   B. Establishing requirements.
   C. Prototyping.
   D. User experience goals.

2) Which of the following are four types of interaction?
   A. Command-based, virtual reality, web and speech.
   B. Instructing, conversing, manipulating and exploring.
   C. Scenarios, use case, essential use case and hierarchical task analysis.
   D. Theories, models, frameworks and paradigms.

3) Which of the following are usability goals?
   A. Effectiveness and learnability.
   B. Memorability and engaging.
   C. Safety and instruction.
   D. Utility and manipulating.

4) The following are purposes of metaphors EXCEPT
   A. As a conceptual model instantiated at the interface.
   B. As a way of conceptualizing what we are doing.
   C. As a way of restricting the kinds of user interaction that can take place at a given moment.
   D. As a way of visualizing an operation.

5) Which of the following is correct ordered of human information processing stages?
   A. Comparison, response selection, response execution and decoding.
   B. Decoding, input selection, input execution, and response comparison.
   C. Encoding, comparison, input selection and input execution.
   D. Encoding, comparison, response selection and response execution.

6) The following are internal cognitive frameworks EXCEPT
   A. Distributed cognition.
   B. Gulfs of execution and evaluation.
   C. Information processing.
   D. Mental models.

Continued...

7) The following are required in a co-presence setting EXCEPT
   A. Awareness.
   B. Remote conversations.
   C. Physical coordination.
   D. Shareable interfaces.

8) The conversation analysis was introduced by ___.
   A. Harvey Sacks, Emanuel Schegloff and Gail Jefferson.
   B. Hiroshi Ishii, Minoru Kobayashi and Jonathan Grudin.
   C. Jenny Preece, Yvonne Rogers and Helen Sharp.
   D. Paul Dourish and Sara Bly.

9) What is an open source software?
   A. A manifestation of a design that allows stakeholders to interact with it.
   B. A solution to a problem in a context.
   C. A source code for components, frameworks or whole systems that is available for reuse or modification free of charge.
   D. An approach that integrates UX design activities with an agile approach to product development.

10) The following are important practical areas for AgileUX EXCEPT
   A. How to align UX design and agile working practices.
   B. What documentation to produce, how much and when.
   C. What user research to conduct, how much and when.
   D. When requirements are specified completely before any implementation begins.

Continued...

Section C: Answer all questions.

1. Describe each of the following design principles in your own words and give ONE example for each design principle.
   - Feedback.
   - Constraint.
   - Consistency.

(6 marks)

Answer

2. Conceptual model is a high level description of how a system is organized and operates. Briefly describe the FOUR main components of conceptual model.

(4 marks)

Answer

Continued...

Section D: Answer all questions.

1. Discuss how to design products based on the THREE levels of emotional design model and give ONE example for each level.

(6 marks)

Answer

2. Explain the phrase "external cognition" in your own words and give THREE examples of external cognition.

(4 marks)

Answer

End of page